

AWIS

Newsletter

The Airborne Weapons Information System - Yesterday, Today and the Future

JUNE 1996

Letter of Introduction:

The intent of our AWIS NEWSLETTER is to familiarize the YESTERDAY, TODAY and the FUTURE customers of AWIS and it's systems. We have a continuous rapidly changing workforce in our environment today and people need to be keep informed of the tools available to support them in doing their jobs and of the new enhancements to those tools.

As you read on, you will notice the AWIS team has been around for a long period of time and in order to accomplish that feat, we have continued to strive to improve our systems and process as to what our customers want to see.

You will notice, also, a feature called FROM THE DESK...., which will regularly appear in our NEWSLETTER. This will provide you with a glimpse of an individual on the AWIS team and how they support you, as customers.

If you have questions or suggestions to our AWIS NEWSLETTER, please call the AWIS help desk, (805) 484-6512.



OPNAVINST 5450.21 and NAVAIRINST 5400.1 assign the Naval Air Systems Command (NAVAIRSYSCOM), Logistics Competency (3.0) and Research and Engineering Competency (4.0) responsibility

for research, acquisition, engineering and logistics support. To perform the assigned functions and tasks NAVAIRSYSCOM relies on the Airborne Weapons Information System (AWIS). AWIS provides information and support for the development, production, maintenance, follow-on-engineering, acquisition and logistics support for a wide range of Airborne Weapons and related equipment. AWIS is a

Creator: NAWCWD, Pt Mugu, CA

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distributed database of the Naval Aviation Logistics Data Analysis (NALDA) Upline Information System and is a single information system for upline reports and analysis of weapon data and information, as mandated by the Department of the Navy Information Systems Plan.

AWIS is collectively made up of the following components:

AWARS - The Airborne Weapons Analysis and Reporting System

CADMSS - The Configuration and Data Management Support System

MARS - The Management Action Reporting System

AWIS also employs a sophisticated telecommunication network connecting the national and international weapon sites together. In the past, each system had an independent network connecting to various activities. By putting all the systems under AWIS, it eliminated the redundant lines, thereby reducing operating costs to the systems.

Before AWIS was implemented, the databases were stand-alone and contained some of the same weapons information throughout the weapon's life cycle, but the information was not available from a single source.

By interfacing the databases to each other it

allows informational unity and cohesion among related weapon databases. This integration ensures the availability and integrity of information and also achieves a present and future cost avoidance.

While ensuring timely information for analysis by key decision makers, AWIS primarily supports its customers by providing the following important elements:

- Fleet Problem Resolution
- Resource Management
- Engineering Analysis
- Data Management
- Weapons Requirement Planning
- Maintenance Production Support
- Configuration Management
- Contract Administration Support

AWIS provide weapons information to:

- NAVAIRSYSCOM and other Sponsors
- Fleet Activities
- Naval Weapons Stations
- Other DOD Activities
- Weapons Designers
- Support Contractors

Weapon Systems covered by AWIS are:

- Airborne Weapons
- Conventional Weapons
- Aircraft
- Targets
- Containers
- Related Ground

- Support Equipment
- Remotely Piloted Vehicles (RPV)
- Unmanned Air Vehicles (UAV)
- Launchers

ABOUT AWIS DATABASES



CADMSS

In the late 1960's and early 1970's, the Fleet Weapons Engineering Directorate (FWED) developed the capability and resources to support its functional mission as Cognizant Field Activity (CFA), and In-Service Engineering Agent (ISEA) for all Naval air-launched weapons and support equipment.

As a result of this effort several support systems were developed. The methods progressed from processing information and data manually to automated batch systems and ultimately to on-line integrated master databases. Each method was evaluated for the ability to support total life cycle requirements of airborne weapon systems effectively and efficiently. This effort resulted in the development of a unique and significant management tool

operated and managed by the Naval Airborne Weapons Center (NAWC), Pt. Mugu and FWED.

The Configuration and Data Management Support System (CADMSS) was developed as a centralized automated on-line data collection and retrieval system to support the configuration management (CM) and data management (DM) requirements imposed by NAVMATINST 4130.1A Department of Defense Configuration Management and NAVMATINST 4000.15A Department of Navy Data Management. It was designed around time-sharing control computer processors with input and output peripheral equipment. This equipment was interconnected by a telecommunications network that enabled the weapon support community to rapidly exchange working information.

This centralized database of technical information was established and maintained jointly by field activities supporting NAVAIRSYSCOM. Responsibilities for maintenance of the common databases are functionally aligned with activities serving as documentation and file custodians. This technique eliminates redundant efforts associated with data entry and file maintenance tasks, and provides weapons engineering personnel in the Navy establishment with current information.

The CADMSS was a new approach to a nagging configuration management

problem. It provided the Navy with a standardized automated system accessible to the users via remote data terminals. The master database of baseline data, contracting information, and engineering change data could be established early in the Research and Development phase by the various participating activities. The data was continually refined and transitioned between field activities as the weapon system progressed through the test and development, production, and operational phases of its life cycle. This technique provided a single standard database, eliminated redundant effort, and provided instant access to management information needed for change control to ensure that continuity of logistics existed, that operational use was not impaired, and that the required changes were incorporated into the weapon systems.

CADMSS significantly affected the mode-of-operation and level of manpower required to accomplish the configuration management functions. The system permitted using activities to eliminate redundant labor efforts within and between commands, resulting in a direct cost savings to the commodity managers. It further permitted using activities to reassign existing personnel to support new commodities within ceiling/billet constraints.

The CADMSS of yesterday, originally resided on an IBM 3033 from 1977-1989, and utilized TOTAL software. The

communications interface was maintained by ENVIRON/1 and the application programs were written in ANSI COBOL.

CADMSS today is designed to provide its customers with all the CM/DM information system necessary to support the areas of in-service engineering and logistics. CADMSS continues to support its customers by describing the following:

- What Configuration Items (CI) make up a system?
- What documentation and baselines identify the system?
- What procurement baselines exist?
- What engineering changes are proposed for a system or CI?
- What is the impact of the engineering change on documentation, parts and contracts? Where are they in the approval process?
- What is the processing or revision status of a change to a document?
- What contracts exist?
- What are the contract data requirements list (CDRL) deliverables? Where are they?

The CADMSS has matured into a client server environment/architecture employing distributive processing while it accesses various personal computers (PCs) using several emulation packages. The fully integrated PC transition took place in January of 1990. Under this architecture, the database resides in the server while the

application programs reside in the PC. This allows full use of the server CPU power to respond to queries and reduces equipment at the host site. An enhanced ORACLE based CADMSS was made available in 1992.

AWARS

The primary objective of AWARS is to provide improved data collection, analysis, processing, and reporting to enable NAVAIRSYSCOM customers to better assess reliably the strengths and weaknesses of airborne weapons and related equipment. Previously, to accomplish this assignment, NAVAIRSYSCOM integrated data elements collected by a series of disjointed systems. In order to correct the deficiencies of the previous environment, AWARS integrated production, logistics, maintenance, and performance data into a single storage area. This integration of data provides greater accuracy, requires less physical storage, provides more efficient data retrieval, and provides easier maintainability. It also improves NAVAIRSYSCOM's decision-making ability through the improved efficiency, accuracy, and data integrity.

AWARS supports its customers by providing a chronological history of significant performance and maintenance events for all weapons systems supported by NAVAIRSYSCOM's Airborne Weapons Logistics Division (All Up Rounds (AURs), test sets, serialized lower level

components, and non-serialized service life limited components).

The AWARS life cycle begins with an As-Built Configuration List (ABCL), which reports the configuration of the weapon as the Navy receives it. Throughout the life of the weapon, several type of information will be reported to AWARS, including: CAPTIVE CARRY data whenever the missile is captive flown by an aircraft; O Level Maintenance Data whenever maintenance is performed on site; I Level Maintenance Data whenever the missile is repaired or tested at a weapons station; Depot Level Maintenance data when the missile is repaired or tested at a depot; test set data, the actual result values of any tests performed; Configuration Summary Forms (CSF) data to report new configurations; and location data whenever a weapon is cross-decked or otherwise transferred, or put into storage.

Specific functions that are supported by AWARS include, but are not limited to:

- a. Logistic support and maintenance performance assessments.
- b. System Reliability, Maintainability, Availability, and Quality (RMA&Q).
- c. Configuration control.
- d. Maintenance planning and management.
- e. Deficiency report investigation and quality control.
- f. Warranty requirements.

- g. Weapon performance assessment.

The data is organized by weapon system in separate databases. Data loaded into the database comes from a variety of sources (e.g., weapon stations, depots, manufacturers, and SLITS) and on a variety of media (disk, tape, downloaded files). Data pertaining to each missile AUR, section, and component is collected beginning with its development and ending with its final expenditure. During the data entry process, on-line validation is used for "within record" checking in order to help preserve the integrity of stored data. The data collected may be divided into the following five areas which relate to the stages in the life of a missile:

- a. Production data.
- b. Maintenance data.
- c. Performance data.
- d. Inventory Management data.
- e. Warranty data.

The data retrieval function of AWARS allows the user to access all data types from a single computer terminal via the AWARS database. The user is able to concurrently retrieve the entire history of a missile AUR, section, or component. These output reports come in three basic formats; Standard Data Displays (SDDs) which appear on the terminal screen, Standard Data Products (SDPs) which are printed in hard copy format for long term reference, and flat data files stored on mass storage media

(disk). Data for reports can be displayed on-line, printed or downloaded to a local PC.

AWARS has taken the lead to transition from its current character based, event driven user interface to a Windows based graphical design. The new front end started beta testing in September 1995 and a limited version was released to selected personnel in January 1996.

AWARS GUI RELEASE DATES

HARPOON	3/96
MAVERICK	4/96
PENGUIN	4/96
HELLFIRE	5/96
WALLEYE	5/96
AMRAAM	6/96
HARM	7/96
PHOENIX	8/96
SPARROW	8/96
SIDEWINDER	9/96

The new AWARS graphical front end will demonstrate many exciting capabilities that should make access to the data much easier and presentation clearer. There will be point and click capabilities and easy printing to your local printer. There will be a built-in Ad-Hoc report generator, easy enough for the novice to use but still capable of some advance SQL manipulation. The interface will include the ability to select information from one report and use that to generate other reports. It will include the ability to transfer report output into an EXCEL or MICROSOFT WORD document. It will enable a user to query on multiple serial numbers or part number, and

to select the sort order of any report by a simple drag and drop method. There will also be a batch button to enable a user to submit a query, have the report run off-line, and view it at a later time.

PCAWARS AND VALIDATION NOTES

As we migrate the data collection from old key entry processes, the new PCAWARS data collection and validation system becomes a part of the new streamlined AWIS programs. We have implemented the new PCAWARS GUI forms at WPNSTA Yorktown for both AMRAAM and SIDEWINDER MDS/CSF. We will continue to implement PCAWARS at the major maintenance sites during this FY as fiber drops are installed.

Using PCAWARS provides the weapons technician with instant verification of the field being entered. As the form resembles the MDS 8600/11, adapting to the PC version is made easier.

As the tech moves through the form, data may be entered directly or by 'point & click' open a table that contains valid data. One of the newest fields that can now be filled is a simple 2 character COUNTRY CODE field. Entry into this field validates against a table of country codes, that we introduced to the NAWMP 8600.2B last year. Now, we can determine Navy assets, Air Force assets, and foreign military sales assets. This

should prove a valuable tool for end users of this data.

The following fields in the MDS 8600/11 have VALID TABLES to aid in verifying data entered into the forms:

- Action Activity JCN Block 1
1A. UIC, 1B. Date, 1C., 1D
- 2. Nomenclature
- 3. Part No.
- 4. Serial No.
- 5. Ownership (Country Code)
- 9. Test Equip Desig.
A.,B.,C.,D.
- 10. Test Equip SN A.,B.,C.,D.
- 11. Date
- 12. Time
- 13. OPRN
- 14. TE BLK LTR
- 15. Nomenclature
- 16. Part No.
- 17. Serial No.
- 18. SRCE CODE
- 19. Lot No.
- 21. RSLT
- 22. PRES COND CODE
- 23. DISP
- 25. Failure Category Codes

This increases the fields increased from 4 to 20. Better data will be the result! More next time from the PCAWARS staff.

MARS

The Naval Air Warfare Center, Weapons Division (NAWCWPNS) was appointed as the central agency for processing airborne weapons, target, and associated equipment information. A repository of technical progress and historical action data is available through the Management Action Reporting System (MARS).

The MARS consists of the following components: Deficiency Reporting Log System (DRLOG), the Management Action System (MAS) and The Consumable Materials Tracking System (COMAST)

The DRLOG database provides the single source of data for the cognizant field activities tracking airborne weapons, armament and ordnance hardware problems experienced by the fleet and organic maintenance activities, and also hardware performance deficiencies.

DRLOG supports its customers with the individual fleet reported Quality Deficiency Reports (QDR), explosive mishap reports and other deficiency types, which are then grouped into problems for field activity engineering investigation and corrective action. DRLOG also provides the automated baseline for publication of the NAVAIR Airborne Weapons Corrective Action Program (AWCAP) volumes.

The Airborne Weapons Corrective Action Program (AWCAP) is an effective closed loop system that provides the airborne weapons community with fleet-wide visibility on the status of deficiency reports, subsequent investigations, and corrective actions for both new production and in-service airborne weapons and applicable equipment. AWCAP is the central repository for airborne weapons deficiency data. AWCAP is essential in supporting specific reporting

requirements and procedures for various defense services.

AWCAP benefits the airborne weapons community by providing on-line accessibility to the DRLOG database and annual hard copy publications, thus, ensuring that corrective action occurs for reported deficiencies. The DRLOG database is utilized by the following customers for failure, repair, and trend analyses on hardware problems, performance deficiencies, and corrective actions throughout the life cycle of a weapon:

- * NAVAIRSYSCOM
- * NOC
- * Naval Weapons Stations
- * Fleet activities
- * Other requesting activities

AWCAP tracks problems, deficiencies, and corrective actions involving the following:

- * Containers & Ground Support Equipment
- * Conventional Ordnance
- * Air-to-Air Missiles
- * RPVs & UAVs
- * Targets

An AWCAP deficiency is primarily reported and generated by the following sources of data:

- * Conventional Ordnance Deficiency Report (CODR)
- * Engineering Investigation Report (EIR)
- * Explosive Mishap Report (EMR)
- * Product Quality Deficiency Report (PQDR) Category I and II

- * Technical Publication Deficiency Report (TPDR)

The source reports are evaluated by various field activity engineers for corrective action. This information is entered into the DRLOG database and maintained by AWCAP. AWCAP used the source report information to identify deficiencies, Monitor Deficiency Report (DR) & Problem Report (PR), identify inadequate products and repair problems, assure appropriate evaluation and corrective action resolution, analyze deficiency and corrective action trends.

The sponsor for AWCAP is the Naval Air Systems Command (NAVAIRSYSCOM) Logistics Competency 3.0 and the project manager for AWCAP is the Naval Ordnance Center (NOC) N83.

The MAS database is designed to support the coordination and management efforts of action items principally identified by Integrated Logistics Support Management Team (ILSMT) meetings and Product Improvement Program (PIP) meetings. MAS provides the data repository for identification, status tracking, and resolutions of action items resulting from weapons engineering and logistics conferences, meetings, reviews, and weapons systems supportability meetings.

The COMAST database provides hazardous and environmentally safe material identification and substitutes.

AWIS Technical Support

The AWIS technical team is constantly striving to maintain appropriate technology while considering what is most cost efficient for their customers. In addition to providing the latest in hardware and software, the AWIS team handles training of all systems, coordinates access, and provides a help desk.

The AWIS Computer Center houses all AWIS applications and provides a variety of technical support including but not limited to DOS, UNIX, HP/MPE, Novell and MAC. Currently, AWIS applications other than E-MAIL are written in Oracle, running on SCO UNIX Pc's, and are the focus of the administration. All data housed within an AWIS application is regularly backed up under a backup schedule that ensure minimal data loss in the event of a catastrophe and now features uninterruptible power for the systems and network equipment in case of loss of power. The team provides full production support for applications such as reports and labels. A tape library is also maintained at the center.

The AWIS Computer Center provides a manned Help Desk to assist customers with problems they encounter within an AWIS application, accessing an application, or general terminal questions. The AWIS Help Desk team will work with your local network support staff to setup and maintain connectivity to any AWIS application when

possible. If in the event a problem cannot be solved immediately, an AWIS engineer will be assigned to the trouble call and work with the customer until a solution is found.

AWIS telecommunications applications were once only reachable through a "dedicated line" network or dial-up modem. This network was an RS232 (your PC's com port) statistical multiplexer network. Designated sites throughout the continental U.S. had leased data lines running between them and CAMAIR, providing the connectivity needed for access. Portions of this network are still in place: China Lake, Yorktown, Crane, and NAVAIR, to list a few.

With the explosion of Local Area Networks (LAN) over the last few years and being linked together (InterNet), access to AWIS has changed dramatically. Customers whose workstations are on a LAN may be on the InterNet, also. In this case, customers can "telnet" into AWIS. Telnet access provides a simple and faster way of accessing AWIS data than the "dedicated line" form of access, thus reducing operating costs.

Two new developments in the AWIS group of databases in the near future will make access easier and more convenient.

The first of these will be the installation of the PPP (Point to Point Protocol) server. We recently acquired a CISCO 2500 terminal access server. This device will allow the users

to dial in using a modem, and eventually will have 8 full V.34 capability dial-in lines available. If the user also has a high speed V.34 modem, communication will be possible at almost 57,600 BPS in many cases. This speed may yield higher actual throughput than a direct INTERNET connection. Access will be available both for terminal emulation as well as PPP. The PPP capability will allow client server access if the proper client side software is installed.

Using the dial-up PPP server will be easy and painless once you have the proper hardware and software. You will need a V.34 modem (internal or external) and at least a 386 level computer with 4 MB of RAM. We can give you the software needed to get started, but of course you will have to buy your own license for the shareware we provide you. We will provide you help to the best of our ability through the AWIS help desk but you will probably need a little help from one of your local "gurus" to get everything set up and working properly on your particular computer because LAN configurations are too different to allow a "universal" installation routine.

The second new development is the AWIS WEB server. We hope to be able to make available this Newsletter on-line, as well as selected reports which you in the weapons community will find useful(*SEE WORLD WIDE WEB, PG 10*) .

Work has begun on modernizing the AWIS Terminal project for the current terminal support environment that started in 1991. At that time, support was needed for a handful of DOS (and 1 MAC) PC terminal emulators, including AWISTerm. Also supported at that time was a single "generic" terminal, the VT100, because all commercial PC terminal emulators and TELNET emulated a digital equipment dumb terminal. The generic support was the "catch-all" for the terminal emulators that were not directly supported with customized Oracle terminal definitions. The customized Oracle terminal definitions allowed the SHOW KEYS (keystroke help screen) to display keystroke functionality customized for a particular brand of PC terminal emulation.

Help calls in 1995 focused on inadequate terminal support in the Windows environment. A solution to consider is to enhance all AWIS products to provide support for generic VT220 and VT320 terminals in the Oracle environment. Most computer/LAN administrators will setup PC software to emulate the VT220 or VT320, if available in their PC terminal emulation software.

Recent work includes analyzing and enhancing Oracle VT220 and VT320 terminal definitions to include support for the special TOP MENU key and modifying all the Terminal Selection Menus and Main Login Menus. Also recently are efforts to create keyboard mappings for

Windows PC terminal emulations from scratch.

AWIS communications will continue to support alphanumeric terminal access methods. Often our customers have little choice in what PC terminal emulation is available to them because the choice is made by their local computer management. After supporting DOS and LAN terminal emulations, the future leads to support for Windows, MACs, and TELNET (TCPIP) terminal emulations (The next section explores more on this topic).

OTHER TECHNICAL INFO

From the Desk of Mr. Fred Lenk

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One of my Special Projects was to prepare an "AWIS Users Terminal Guide" which has become a part of the standard package new AWIS customers receive. This document was written for 2 audiences: 1) Our customers; 2) Our customers' local computer administrator.

The guide will describe in general terms what kind of PC software it takes to connect to the AWIS computer network, some general configuration requirements, and as much specific information as can be published. This new terminal guide will also be available for anonymous ftp downloads, and will be in an email-able format for existing customers.

While this guide cannot document how to use particular

brands of software, it will help our new and existing customers prepare for and resolve terminal connection issues.

- Emulation Software

A development organization can write beautiful programs, but unless the customers can connect to the computers which offer the programs, all is for naught. This aspect of AWIS's business has been one of the most dynamic since I came to AWIS in 1990. At that time, AWIS was just moving away from being a Hewlett-Packard 3000 shop to a generic Unix shop. At that time our customers were using a terminal emulation called Advance Link, which was specially designed to work on the HP3000 computer. Unfortunately, Advance Link didn't work on generic Unix computers. Our customers frequently complained of hung terminals and garbage on screens.

One of my first major contributions to AWIS was to write a PC terminal emulation program which worked in our new Unix environment. That program, AWISterm, was eventually enhanced with special capabilities which made working with the AWIS Oracle databases much easier than generic VT100 PC terminal emulations. However, more and more of our customers are connecting to AWIS via tcpip over internet lines, and AWISterm was not designed for that kind of connectivity.

A while after writing AWISterm, and after I finally got access to the internet, I came across a PC terminal program called MS-DOS Kermit. This was a really good program, and had I found MSDOS Kermit before writing AWISterm, there would have been no need for AWISterm. MS-DOS Kermit is a product of Columbia University (kermit.columbia.edu), and may be freely used by anyone. It is not a shareware or freeware program, and there are copyright limitations to MSDOS Kermit which prevent us from distributing MS-DOS Kermit. I have personally requested permission to redistribute MS-DOS Kermit, and have been denied.

The copyright requests users to buy a copy of the book "Using MS-DOS Kermit", by Christine M. Gianone, published by Digital Press. This is strongly recommended since Columbia does not support users, other than FAQs which can be ftp downloaded from kermit.columbia.edu. AWIS does provide specific help in configuring MS-DOS Kermit for use with AWIS hosts, but beyond that and to take full advantage of MS-DOS Kermit for non-AWIS uses, the book is really required. By the way, the book comes with a copy of the software.

I began using MS-DOS Kermit, "Kermit" for short, instead of AWISterm, in order to determine its suitability for general use by AWIS. I found Kermit to be a much faster terminal, and the file transfer

(using the industry standard Kermit File Transfer Protocol) was also faster than AWISterm's file transfer. The earliest Kermit I used, version 3.11, had a couple downsides however. It didn't have tcpip capabilities, which means it didn't work directly over an ethernet wire such as one might find on a user's local LAN. Another downside is that our customers had become accustomed to AWISterm's easy-to-use keyboard interface to AWIS programs. While Kermit's keyboard could be reprogrammed by the user, it would not be practical for AWIS to provide constant keyboard reprogramming upgrades.

I continued using Kermit thru revisions 3.12, 3.13, and the latest 3.14 release. The latest release of Kermit now offers a "telnet" mode for using a tcpip ethernet terminal, and a special Application Program Command which allows Kermit's keyboard to be remotely reprogrammed so that Kermit's keyboard operates nearly identically to AWISterm's keyboard interface to AWIS Oracle applications. As a result of the upgrades to the latest Kermit, and the positive results I've seen from my testing, AWIS now supports use of MS-DOS Kermit.

Kermit may also be used by our customers who have a dialup modem connection. If we have new customers who do not currently have a PC terminal emulation program, we are recommending the customers obtain the MS-DOS Kermit PC terminal emulation because it has superior

performance and capabilities compared to AWISterm. MS-DOS Kermit may be anonymously ftp downloaded from:

kermit.columbia.edu:/kermit/bin/msvibm.exe

Again we apologize that because of copyright restrictions, AWIS cannot redistribute the program. However, the extra effort required to obtain Kermit is worth the performance. By the way, while Kermit is not a Windows application, it will run as a Windows DOS application. Also, Kermit can make up to 6 simultaneous terminal connections to up to 6 different hosts. So if your host permits it, you can have 6 logins at once. For security reasons, AWIS database programs generally allow only a single login session.

While Kermit provides a tcpip telnet type terminal, it does not include the standard tcpip ftp file transfer protocol for uploading and downloading files. Instead, it uses the industry standard file transfer protocol named kermit. It is interesting to note that the word "kermit" is used with permission of Kermit Frog and Jim Hensen & Associates.

Originally designed to make PC-to-PC file transfers more efficient (as was X/Y/Zmodem protocols), the kermit protocol now rivals other industry file transfer standards for PC-to-mainframe file transfer speed. I have seen file transfer speeds over 30k/sec when using MS-DOS Kermit over tcpip lines.

While ftp file transfers can be much faster than this, ftp file transfers are typically limited by multiplexed connections to the internet, and the amount of traffic on the network. There will probably be little speed difference between ftp and telnet kermit file transfers for many users on long haul transfers.

In addition to the kermit protocol for MS-DOS Kermit, AWIS also supports the AWISterm file transfer protocol, as well as ftp file transfers. AWIS does not support X/Y/Zmodem protocols because of network limitations.

- Emulation SW Configuration Helpful TIPS

In the contemporary datacomm world, the user's terminal emulation is usually determined and configured by the LAN administrator and the user is unfamiliar with the type of emulation or configuration. When trying to connect to AWIS and you are experiencing problems connecting, please contact your local LAN administrator to ensure that your emulation software is correctly configured to work with your Local Network. If after your local experts have checked your end and you are still unable to connect to AWIS, please have your LAN administrator contact our AWIS help desk for assistance.

AWIS customers can connect to AWIS programs using any terminal capable of

emulating a VT100 terminal. But it's important to know that if the customer selects the generic VT100 from the Terminal Selection Menu, the customer will have to know how to map the emulation's keyboard to the original VT100 keyboard. Such information is typically available from the user's local computer administrator (since each commercial PC terminal emulation works differently).

- New Technology

The concept of using a terminal to connect to a host in order to run programs on the host is on its way to becoming "the old way". While it will still be around for some years to come, it is being replaced by client-server technology in which a program running on the user's PC provides the screen displays. The PC only intermittently makes a low level, terminal-less connection with the host when it needs to get new information from the host, and the duration of the connection is only as long as is necessary to obtain new host data.

The popular "web browser" class of programs is typical of this new technology.

WORLD WIDE WEB

We have all heard about being "on the Internet" and "the World Wide Web", but I am sure many of you may wonder what it is really all about. This brief article will hit the highlights and give you a quick overview of what it means.

What is the World Wide Web?

The world wide web, or just "Web", started back in 1989 when Tim-Berners Lee of CERN, the European Particle Physics Laboratory, circulated a proposal to develop a Hypertext system for the easy sharing of information among the geographically separated teams scientists working in the Particle Physics field. The proposed system was to have three main components:

1. A consistent user Interface
2. The ability to incorporate a wide range of document types.
3. "Universal Readership": That is anyone on any type of computer should be able to gain access.

The concept from the very beginning was to share information and make it widely available. The growth of the internet, which was started around 1969 by the use of DOD funding, has been largely fueled by the exponential growth in the number of web servers connected to it.

How does it work?

Remember the word Hypertext from the previous paragraph? That is the foundation of the usefulness of the Web. Hypertext means having information linked by "key" words so that you can search and find the information you really want quickly using "links". The Web is built from a network of computers called

"Web servers" which make documents using something called Hyper Text Markup Language (or HTML) available to anyone who logs in. These computers can have links among all the documents they contain.... as well as links to documents on other computers which are also on the Web through an internet connection.

Why Would We Want to be on the Web?

Advertising... that's why. Many thousands of people log onto the Web every day, some just for the entertainment value, but most in search of information they need to perform their job better. The US Navy is on the Web, NAWCWPNS is on the Web,

Naval Aviation Logistics Data Analysis (NALDA) is on the Web, and they are there to let the Navy and DOD community know who they are and what they do.

How do We get on the Web?

Getting on the Web is easy these days, lots of people have their own personal Web page. We already have an internet connection through the main base. There are 3 other things we need:

1. A computer to run the server software.
 2. Documents telling the world about us, known as "content".
- The content consists of files in the HTML format which say good things about us that other people may wish to know.

3. Approval to "publish" our material and have a Web server. This approval has to come through official channels. Not long ago an admiral from CNO was surfing the Web and found some "sensitive" material being published on the Web. Things kinda hit the fan.... so now you need approval to have a Web server and all your documents have to be cleared, just like paper documents for public release do, before being made available on the Web.

The official AWIS Web page is location on the NALDA World Wide Web Site.

NALDA Web Address:
(<http://navair2.nalda.navy.mil>)

AWIS ARCHIVING

Having good backups can mean the difference of keeping your job, or not. Computer hardware and software is not infallible. Even the Shuttle has computer problems from time to time, and the Shuttle has the best than money can buy! With a good backup system, and adequate spare parts on hand, AWIS can generally recover from disasters in a day or 2. However, it takes time and money to insure an adequate backup procedure. The best way to cost-reduce a good backup procedure, and not reduce the quality, is to minimize the human intervention required for loading tapes and typing in commands to start the backup, etc. We are in the process of writing front-end programs to take care of that very issue.

IMPORTANT FACTS TO KNOW

The following is a list of the minimum requirements to access GUI AWIS:

MINIMUM REQUIREMENTS:

- 386/20 PC (486/33 or greater highly recommended).
- 4 MB RAM (8MB or greater highly recommended).

- VGA monitor (*640 by 480 minimum; Color/17 inch recommended*).

SQL*Net

- 21MB of free disk space for current AWIS GUI applications and

Oracle

- LAN/Network card with INTERNET access
OR 9600 Baud modem (*14400 Baud or greater recommended*).

- Required Software:

- Windows 3.1 or 3.11 or Windows for Workgroups 3.1 or 3.11
 - Windows winsock compliant protocol stack.
 - Oracle SQL*Net / SQL*Net TCP/IP Version 1.x (*Version 2.x recommended*) (*Approximately 5MB*)

- AWIS GUI Applications:

- Deployment Kit, approximately 7MB (only one copy required)
 - AWARS 6.5MB
 - CADMSS 4 MB
 - DRLOG 3.5 MB